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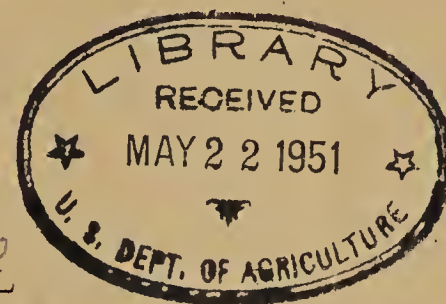
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HATCHERY INSPECTOR'S MANUAL

(Prepared by the Committee on Hatchery and Flock Inspection)
William Guidry, Chairman

FOREWORD

The National Poultry Improvement Plan and the National Turkey Improvement Plan, as outlined in Miscellaneous Publication Nos. 300 and 555 respectively, prescribes definite minimum inspection requirements for both hatcheries and flocks participating under the plans.

Each official State agency in its memorandum of understanding with the Bureau of Animal Industry agrees to "conduct efficiently the inspection work called for in the plan", etc. The procedures used in fulfilling the inspection requirements called for are more or less left to each individual cooperating State.

It is realized that all States participating in the national plans are at some variance in the inspection procedures of hatcheries and flocks due to available personnel, financial resources, administrative organization and length of the testing and hatching seasons. Furthermore, with the continuous expansion and progress of the membership under each plan, and as a result of the free exchange of ideas and frank discussion of mutual problems by State representatives at national and sectional conferences, has come the desire to develop a manual setting forth recommended procedures for conducting inspections of hatcheries and flocks.

The Senior Poultry Coordinator appointed a committee whose principal function would be to prepare for publication by the Bureau of Animal Industry, a Hatchery and Flock Inspector's Manual. This committee consisted of:

William Guidry, Chairman, Louisiana Poultry Impr. Assn., Baton Rouge, La.
Harry O. Hard, Colorado Poultry Impr. Bd., Inc., Fort Collins, Colo.
L. A. Wilhelm, State Poultry Assn. of Indiana, Inc., Lafayette, Indiana
Boyd Ellis, Oklahoma Poultry Impr. Assn., Stillwater, Oklahoma
R. G. Christie, Kansas Poultry Impr. Assn., Manhattan, Kansas
John W. Matthews, Kentucky Poultry Impr. Assn., Lexington, Ky.
Raymond Smith, Massachusetts Dept. of Agriculture, Boston, Mass.

At the request of the committee, this manual is hereby made available to persons responsible for carrying out hatchery and flock inspection requirements and objectives within each cooperating State. It is hoped that this manual will contribute to greater uniformity and effectiveness of inspection work both within and between States.

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I. GENERAL INTRODUCTION

A. Purpose of the Manual

1. A source of information on properties of and procedures for the inspection of hatcheries and flocks.
2. A guide for those who actually perform field inspection work.
 - a. Source of study and reference material particularly for new and inexperienced inspectors.
3. A means of obtaining greater uniformity in the inspection procedure of hatcheries and flocks within each State and between States.
 - a. A means of obtaining greater uniformity in the enforcement action taken for various instances of non-compliance by participants within a State and between States.

B. Purpose of Inspection Work

1. Each official State agency, in its memorandum of understanding with the Bureau of Animal Industry agrees:
 - a. "To conduct efficiently the work called for in the National Poultry (Turkey) Improvement Plan."
 - (1) Minimum inspection requirements for each classification of chicken and turkey hatcheries and flocks are prescribed in USDA Miscellaneous Publications 300 and 555.
 - b. "To formulate and have signed contracts or agreements between the official State agency and all participants except flockowners who are affiliated with participating hatcheries."
 - (1) In signing this contract or agreement, each hatcheryman and flockowner agrees to abide by all provisions, requirements, and regulations prescribed in the latest revised issues of Miscellaneous Publications 300 and 555, and such other regulations promulgated by the official State agency.

- c. "To report, to the Bureau of Animal Industry of the U. S. Department of Agriculture any member or members of the poultry industry who have been discontinued from participation due to unsatisfactory compliance or who persistently fail to comply with all the provisions of the National Poultry (Turkey) Improvement Plan."
 - d. "To inspect the advertising of all members of the poultry industry within its jurisdiction who are participating in the National Poultry (Turkey) Improvement Plan for the purpose of ascertaining whether or not they are complying with its provisions."
 - (1) Official plan terminology can only be used by participants.
 - (a) Necessary action should be taken with members not fully complying with provisions, regardless of whether non-compliance is due to willful reasons or through negligence or ignorance.
 - (b) Necessary action should be taken when non-participants are found to be using official terms.
2. Inspectors can render invaluable service to hatcherymen and flockowners by offering "on the spot" constructive suggestions for the improvement of their respective enterprise.
- a. Participants who understand and fully comply with all provisions welcome a thorough inspection as it is to their benefit and protection.
 - (1) A major difference between participants and non-participants is the fact that products sold by participants have a definite breed improvement and disease-control program behind them and that they are produced and sold under supervision of an official State agency.

NOTE: Hereafter, unless specified, reference to the plan shall include both the chicken and turkey plans.

II. HATCHERY INSPECTION

A. The hatchery inspector.

1. Attitude.

a. Primarily that of a teacher rather than a policeman.

(1) The main objective is to get willing compliance. A hatcheryman not in complete compliance might through proper procedure adjust his operations to comply fully. Proper attitude is not one of trying to "catch" a member attempting to pull a "fast deal" but one of assistance and encouragement.

(2) Offer constructive suggestions for improvement if the situation warrants it and only if you are sure of what you are talking about and know you can put it over.

(a) For some inspectors an attempt to give advice should only be made when asked. Explain as the occasion arises but don't oversell the plan.

(b) Do not be afraid to say, "I don't know but I will find out." Then be sure to find out and deliver.

b. Friendly approach and a friendly personality.

(1) Be pleasant and congenial, and talk the hatcheryman's language; in other words, gain his friendship and cooperation. Once he sees the intent back of your work he will realize its value and importance. After all, you are responsible for progress of the plan and the continuation of your job.

(2) Avoid being overly intimate and overly familiar.

(a) A hatchery inspection is a business proposition.

(b) Do not discuss business of other participants.

(c) Commend him if compliments are in order.

c. Be patient, thorough, and tactful.

- (1) An argumentative attitude and raising your voice will not get the job done. Speak softly but carry a big stick.
- (2) Treat all hatcherymen alike. Conduct a thorough inspection regardless of past record, reputation, or size. A thorough job will command the hatcheryman's respect.
- (3) When evidence of non-compliance is discovered, be diplomatic about pointing out the irregularity.

d. In general, maintain an attitude that promotes cooperation, pride and confidence, and keep in mind your responsibility and opportunity to contribute materially to the advancement of the poultry industry.

2. Qualifications.

a. You should know the purpose and objectives of inspector's job thoroughly.

- (1) Inspecting a hatchery is not merely a mechanical operation. It is part and parcel of our improvement program.

b. You should know the history of the foundation and organization of poultry improvement work from a national as well as from own State standpoint.

- (1) You should have a thorough knowledge of the latest revised rules and regulations governing the plan. Be able to look up information quickly and accurately interpret it from M.P. 300 and 555.
- (2) Know the administration, rules and regulations, and operational plan of your own official State agency.

c. Educational and practical knowledge in poultry husbandry.

(1) Know enough genetics to discuss flock-improvement work intelligently.

- (a) Tell your participants about the use of key flocks of each breed for replacement purposes; the value of using males from hens of known production and egg weight; what Record of Performance and Register of Merit means; and how to interpret the records of specialized breeders as listed in Hatchery Tribune and the R.C.M. Directory.
- (b) If hatcherymen are selling more than one grade of chicks be able to ascertain the meaning and authenticity of each grade.
- (c) Know the genetic background for setting eggs "reasonably uniform in size and shape, and sound in shell". Also why "in the case of all White-egg breeds, U. S. Approved hatching eggs shall be reasonably free from tints and eggs of other U. S. breeding stages shall be free from tints."

(2) Be able to discuss pullorum disease in all its aspects and the part the hatcheryman is playing and how he can contribute further to its control.

- (a) The principles underlying and the value of multiple testing hatchery supply flocks.
- (b) Encourage the hatcheryman to qualify for the higher classes of pullorum disease control.
- (c) Encourage the setting of eggs for replacement purposes from flocks with no reaction on recent tests and the separate incubation of such eggs.
- (d) Discuss proper sanitation and fumigation methods and values therefor in control of pullorum disease.

- (3) Have educational background and practical experience in every phase of poultry production.

- (a) Know management practices, disease prevention, and control, feeding, housing, etc. of baby chicks, growing chickens, and adult stock.

d. Educational and practical knowledge of hatchery management.

- (1) A general knowledge of different makes and models of incubators.

- (a) Have working knowledge and access to information dealing with principle of incubation, number of setting trays, capacity of one tray, total incubating capacity, number of setting trays, hatching capacity and total capacity of the various models of the leading types of incubators. (At least of those models found within your State.)

- (b) Have a thorough knowledge on how to operate an incubator for once -a-week and twice-a-week setting.

- (c) Know what sanitation means with regard to interior and exterior of machines, the incubator room and equipment and brooder room and equipment.

- (d) Know recommended methods and procedures for incubator fumigation.

- (e) Know the fundamentals of bookkeeping in connection with the operation of a U. S. Certified or U. S. Approved hatchery.

e. Be thoroughly familiar with the contents and able to competently execute N.P.I.P. Form 5, Hatchery Inspection Report, or its equivalent.

B. Hatchery inspector's material and equipment.

1. Latest revised issues of U.S.D.A. M.P. 300 and 555.
 - a. Copy (if any) of proposed changes adopted at last National Plans conference if not incorporated in M.P. 300 and 555.
2. List of dealer and hatchery participants in your State by N.P.I.P. and N. F.I.P. classification for the current year.
3. A.H.D. 36 and A.H.D. 105 (and supplements if any) - List of Dealers & Hatcheries Participating in the National Poultry (Turkey) Improvement Plan for the current year.
 - (a) The classification of out-of-State participants may have changed since these lists were formulated; nevertheless, they are useful as a reference for plan classification of out-of-State shippers and for the name of the official State agency, and of the contact representative.
4. Latest issue of A.H.D. 35 and A.H.D. 110 - U. S. Record of Performance Breeders Participating in the National Poultry (Turkey) Improvement Plan.
5. Latest issue of Directory of U.S.R.C.F. Breeders Qualifying for the U. S. Register of Merit Breeding Stage.
6. Copy of Standard Directory and Buyers Guide published by Poultry Supply Dealer, Chicago, Illinois, or Hatchery and Feed Merchandising Directory, Mt. Morris, Illinois.
 - (a) To look up manufacturers of egg scales, fumigants, testing equipment and other hatchery and poultry equipment.
 - (b) Gives name and address of all State Poultry associations and poultry workers at Agricultural Colleges; contains helpful charts such as Egg Price Calculator and Egg Cost per 100 Chicks.
7. Latest copy of Who's Who in the Hatchery World, published by the International Baby Chick Association, Kansas City, Missouri.

8. Brief chart on poultry diseases.
9. Chart to figure pullorum percentages.
10. Manufacturer's Manual for the type of incubators found in hatchery to be inspected.
11. Adding machine (optional).
12. Egg scales and standard check weight.
13. Clean smock. (Disinfected footwear and rubber gloves are highly desirable. These may be furnished by hatchery).
14. Two or three previous inspections or a summary record which has a history of the hatchery giving its strong and weak points.
15. N.P.I.P. Form 5 (Hatchery Inspection Report) or an equivalent State-developed form.
 - (a) Sample copies (for explanatory purposes) of N.P.I.P. Form 15 (Report of Sales and Hatching Eggs, Chicks and Poults, to Hatcheries) and N.P.I.P. Form 16 (Record of Hatching Eggs, Chicks and Poults Purchased).
16. List of hatchery supply flocks of the hatchery to be inspected showing name and address of each flockowner by breeds and varieties, number of layers, percent reactors and breed and pullorum classification of hatchery. This list is prepared in the office of the official State agency from information obtained from N.P.I.P. Form 3 (Flock-Selecting and Pullorum-Testing Report), sent in on each supply flock for that hatchery. A.H. 519a (Summary of Flock-Selecting and Pullorum-Testing Reports) may be used to record this data.

NOTE: When more than one grade of chicks are produced and sold from the same breed or variety each grade of flocks are treated as separate breeds.

17. Sample copies of official labels supplied by the official State agency.
18. Forms or work sheets to record and analyze:

- (a) Egg purchases from flockowners. A three-week period is listed for each flock and compared to a probable delivery figure.
- (b) Egg purchases from other hatchery participants.
 - (1) Eggs sold to other participants and marketed.
 - (2) Holdover purchases from previous weeks.
- (c) Chicks booked, purchased and sold.
- (d) Origin and disposal of various grades of chicks if produced.
- (e) Setting data from hatcheryman's setting record.
- (f) Tray inspection.
- (g) General summary.

C. Hatchery inspection procedure.

(In view of the fact hatchery inspection procedure will of necessity differ between States, the committee felt that a rather complete and all-inclusive hatchery-inspection procedure should be outlined. This would permit State inspectors to omit any procedure which he deems impractical and not applicable to his own State conditions.) The following recommendations are suggested to be applied to hatchery inspection insofar as possible, bearing in mind that perfect compliance should be encouraged, not necessarily through enforcement, but rather by education and public relations. Remember, also, that the quality of inspection work is more dependent upon you, the inspector, than on this manual.

1. Prior to arrival at hatchery.

- (a) Before leaving the office of the official State agency list flockowners alphabetically by breed and variety of the hatchery to be inspected. Show hatchery grade of flock, (if more than one grade of chicks are produced and sold treat each grade as a separate breed) number of layers, and percent reactors on the last test.

Hatchery _____

EXAMPLE: Sample Form 1 N.P.I.P. class _____

| Breed | Flock- owner | Grade of flock | Number layers | Percent Reactors Last test | <u>Egg Purchase Record</u> | | | No. eggs per hen per wk. |
|-------|-----------------|-------------------|------------------|----------------------------------|----------------------------|------|------|--------------------------------------|
| | | | | | Date | Date | Date | |

b. Check your material and equipment. See that you have the necessary publications, forms and work sheets necessary to carry out your inspection.

(1) It is necessary for you to have egg scales and a standard check weight to check your scales and the one the hatcheryman is using.

(2) Review two or three previous inspections.

(3) Review operation of make and model (if known) of incubators used in the hatchery you are to inspect.

2. Upon arrival at hatchery.

a. Contact owner or manager. An efficient hatchery inspection cannot be conducted with the hired help. State your business to him, ask his cooperation and proceed with the work at hand.

b. Before entering the hatchery room, it is advisable for the hatchery to furnish you with a clean smock and proper footwear, which should be disinfected before and after work in the hatchery.

3. Request egg-purchase record from supply flocks. (See General Regulation 6 in M.P. 300.) List number of eggs purchased from each flockowner for the three preceding weeks on Sample Form 1 or its equivalent. It is sometimes better to record eggs purchased only for those eggs in the machines. This facilitates establishing the identity of eggs under incubation.

- a. Check egg-purchase records of each flockowner against probable deliveries. Multiplying the number of hens by four (4) would allow for a 57 percent daily production. Actual delivery of eggs could, of course, exceed this amount but it would serve as a check. Unless birds have been added, the changes are there are fewer layers at the time of hatchery inspection than is shown on N.P.I.P. Form 3.

- (1) If flockowner is supplying over four eggs per bird per week it would be wise to check further.
(Average weekly deliveries amount to approximately one case per 100 hens.)

- b. Check list of flockowners supplying eggs to the hatchery against the list you prepared to ascertain if all N.P.I.P. Form 3's have been sent in.

- (1) Check pullorum tolerance and N.P.I.P. class of each flock against classification of hatchery.

4. If eggs have been purchased from some source other than the hatchery's own supply flock, request list of shippers with the date and number of eggs of each variety for the three weeks period.

- a. Request N.P.I.P. Form 15 covering such eggs. Inform hatcheryman that such shipper is required to send him a copy of this form with each shipment. If Form 15 is not available request express receipts or invoices covering eggs purchased from outside sources. Only as a last resort should you ask to see check stubs to vouch for authenticity of eggs purchased.

- (1) Check N.P.I.P. class of shipper found on Form 15 against that of hatchery. If shipper is from out-of-State look up his classification in A.H.D. 36. If he is not sending Form 15 with each shipment make a note to write contact representative of his official State agency relative to this.

- (2) Check shipper's egg-case label. If no labels or improper labels are used make a note to write contact representative.

5. Hold-over purchases from previous weeks are entered separately.
6. Eggs purchased from flockowners, other hatcheries and hold-overs can be added together to obtain all eggs acquired during the three-week period.
7. Enter on prepared form or work sheet, eggs sold to other participants and those that were marketed. This number when subtracted from eggs acquired should give you a figure which should check closely with eggs set.
8. Ask for and examine setting (incubation) record of hatcheryman for the three-week period. List on a work sheet hatching eggs set by breed and variety and hatchery grade for same three-week period.
 - (a) Check setting record against egg-purchase record. If eggs are sold to other participants or if market eggs are sold subtract these from eggs acquired, (from flockowners, other participants and hold-overs). This figure should be about the same as total eggs set.
 - (b) The difference between eggs set and the total number of eggs acquired, minus eggs sold to other hatcheries should check closely with hold-overs or market eggs sold for the three-week period.
9. Enter on prepared form or work sheet chicks sold or booked as to variety and grade for the three-week period. Check sales record against setting record. See General Regulation 6 in M.P. 300.
 - (a) List chicks purchased from other participants. (Check classification and grade). Request Form 15 covering these purchases.
 - (1) The number of chicks purchased subtracted from the total chicks booked or sold can be used to compute the percent of grade and total chicks booked.

10. Request hatchery operator to prepare the machines for inspection in order to avoid possible damage to equipment and eggs.

(a) Under normal conditions the inspector should not have hatching compartments opened to inspect eggs or chicks in process of hatching.

(b) Determine before going into the machine the approximate setting capacity of each tray.

(1) List number of trays for each flockowner by varieties, grade and setting or hatching date in incubators on form of work sheet developed for this purpose. Do the same for eggs purchased from other participants. Transpose trays to numbers, dozens, or cases received from each source.

a. Compare eggs received and set for same period to see that no more eggs are in incubators than were received from each source.

b. Check identity of eggs in incubators against source of eggs from egg-purchase record and flock list.

c. Hatchery grades: Where the hatcheryman is selling more than one grade of chicks such as AAA, XXXX, four stars, U. S. Approved and U. S. Certified, etc., the grade of chicks should be predetermined from the source of supply; insist that he identify grade on each setting tray on hatchery card; each grade of chicks should be handled separately and independently of other grades. The percent of chicks sold of each hatchery grade should not be greater than the percentage of birds of each hatchery grade in supply flocks. It is not unreasonable to expect the hatchery offering for sale two or more hatchery grades of chicks to keep adequate records on the segregation of these grades.

One of the most difficult tasks in connection with hatchery inspection is that of checking the grades of chicks produced by the hatchery. The following suggestions may serve as a guide:

Examine and study the method used by the hatcheryman to establish grades of supply flocks or other sources of hatching eggs.

If the grading method used by the hatcheryman has a sound basis and is justifiable proceed with grade investigation. (If in your opinion it is not, secure all the data you can and report it to your official State agency.)

After grading basis is studied, check number of eggs purchased of each grade by breed and variety with number of layers of that grade. (Request Form 15 or other proof if grades are purchased from other participants.)

From setting record secure number of eggs set of each grade and variety and compare with eggs purchased.

From tray inspection record secure number of eggs being incubated of each grade by breed and variety and compare with setting record.

From bookings and sales secure number of each grade by breed and variety and check with probable hatch of these grades. (If more than 80 percent of eggs set of each grade by breed and variety is booked or sold, investigate further and more closely.)

It would be desirable and advantageous if the inspection was conducted during the time the chicks are being hatched and graded for shipment or delivery to assure the official State agency that the identification of various grades as advertised by the hatchery are being complied with.

11. Have the hatchery operator remove one or more trays of eggs from each source as needed.

(a) Check eggs in each tray examined for size, shape, shell texture, color, and cleanliness. A work sheet

can be developed to summarize inspection of eggs by trays. This form could show number of eggs in trays that are underweight from each source.

- (1) (Refer to General Regulation 23 in M.P. 300 and General Regulation 22 in M.P. 555.) This same form could provide for listing number of eggs that are off color, dirty, and those with poor shells. (Refer to General Regulation 5 in M.P. 300 and 555.)
 - a. Representative sample of eggs from each source should be weighed. With some experience you should be able to glance at eggs in the tray and pick out those that are underweight. It is suggested that you allow a one ounce weekly loss in weight due to evaporation of incubated eggs.
 - b. Recommend uniformity in shape. There is no set rule to follow, but suggest hatcherymen avoid extremes in shape, such as too blunt, too pointed, too round, etc.
 - c. Urge setting eggs with strong and sound shells. They hatch better. Shell texture is influenced by the diet of the layer but poor and sound shell texture are also inherited factors. Eggs with heavy calcium deposits, ridges, and thin shells should not be set.
 - d. What constitutes a reasonable number of tinted eggs in the case of U. S. Approved hatching eggs from the white-egg breeds is left up to your judgment. Recommend closer culling of eggs prior to setting if any tinted eggs are present.
 - e. Hatching eggs should be free from dirt and filth. Mention disease hazard and low hatchability of soiled eggs. The flockowner is mainly responsible for dirty eggs but this does not excuse the hatcheryman for setting them.
- (2) Examine eggs to be set as well as those being incubated for the above-mentioned qualities.

12. Examine interior of incubator for sanitation.

(a) Examine setting (and hatching trays if feasible) trays for sanitation.

(1) Interior of incubators should be cleaned between hatches and be clean at all times. See General Regulation 4 in M.P. 300 and 555.

(2) Suggest scrubbing of trays and disinfecting them. Steam cleaning is also very effective.

13. Have hatcheryman explain fumigation method used.

(a) Fumigation is required in the provisions of the plan. The method used should be at the discretion of your official State agency.

14. Examine exterior of incubator for sanitation.

(a) Suggest that hatcheryman not use the top of the machines as a storage space or permit dust to accumulate.

15. Examine general arrangement and sanitation of hatchery and hatchery equipment.

(a) Encourage use of a hatchery for the purpose intended. Discourage use as a storeroom. It should be physically clean with a neat general appearance.

16. Examine brooder room and brooding equipment for sanitation.

(a) Brooding in the hatchery should be discouraged as it is a disease hazard. Effective July 1, 1949, the plan will prohibit brooding in the incubator room. Ventilation should be such that air from the brooder room does not get into incubator room.

17. Check method of waste disposal. Dump barrels should be covered and properly washed and disinfected after being used.

18. Check on custom hatching facilities. See paragraphs 12 and 13, in Article 3, Section 1 of M.P. 300. Also see paragraphs 11 and 12 in Article 3, Section 1 of M.P. 555.

(a) If custom hatching is done in an adjoining room to the U. S. Pullorum-Tested or U. S. Pullorum-
Controlled incubators, a separate entrance must be provided and there should be no connecting openings between the two compartments; a separate outside entrance is preferable to an arrangement such as having a short hall with two doors between compartments.

(1) A separate building entirely separate is more desirable .

(b) Discourage custom hatching from non-qualified flocks.

19. Check hatcheryman's advertising copy in handbills, price lists, postal cards, envelopes, State newspapers, local newspapers, printed booklets, poultry magazines, signs and posters inside or outside of his establishment, radio, etc. (See General Regulations 15, 23, and 18 in M.P. 300, and General Regulations 12, 13, 15 and 24 in M.P. 555.)

20. Check type of chick boxes used in shipping chicks. (See General Regulation 8 in M.P. 300 and 555.)

(a) Discourage the re-use of chick boxes.

21. Check for the use of official labels. (See Regulation 14 in M.P. 300, and General Regulation 11 in M.P. 555.)

22. Examine chicks being sold. (See General Regulation 7 in M.P. 300 and 555.)

23. Additional means of obtaining information concerning the hatchery being inspected.

(a) From local express office.

(1) Express receipts may help verify source of eggs and chicks purchased from other hatcheries in lieu of or in addition to Form 15.

- (b) From correspondence and invoices hatcheryman receives from other participants who ship eggs or chicks to hatcheryman.
- (c) Learn to know all employees of a hatchery.
- (d) Listen to customers and flockowners when in the hatchery.
- (e) Carefully check local newspaper advertising.
- (f) Check labels on egg cases and chick boxes, (full and empty ones) that have been received from other participants.
- (g) Learn to know your hatcheryman.
 - (1) Comments and criticisms from competitors should be listened to but not necessarily accepted as factual.

24. Summarize hatchery-inspection data.

- (a) The sum and substance of hatchery inspection is the identification of each lot of eggs (or chicks) from the time purchased until the chicks are delivered in order to vouch for the compliance of the hatcheryman with the rules and regulations of the National Poultry (Turkey) Improvement Plan and the official State agency.
 - (1) It is to the hatcheryman's advantage to keep adequate and complete records on each lot of eggs and chicks bought and sold if for no other reason than to permit checking back on the source of origin of any lot at any time in the event of disease outbreaks.
- (b) Make a record (circle in red if desired) of any deviation, irregularity and violation. Some instances of non-compliance are:
 - (1) Inadequate system of record keeping.
 - a. Form 3's not available or not properly signed

and sent in.

- (b) Egg-purchase record unavailable or incomplete.
 - (c) Form 15's not available (or other proof) to cover purchases from other participants.
 - (d) Inadequate setting record.
 - (e) Greater number of eggs on setting record than were purchased.
 - (f) Inadequate identification of eggs found in setting and hatching trays, particularly if different grades of chicks are sold or of eggs custom hatched.
 - (g) Greater number of eggs in incubators than were listed as purchased from individual flockowners or from other participants.
 - (h) Insufficient record of chick sales and bookings and sales record greater than produced.
- (2) Eggs purchased or incubated not meeting the requirements.
- (a) Eggs from non-tested flocks.
 - (b) Eggs from flocks not meeting pullorum tolerance of hatchery.
 - (c) Eggs that are under weight tolerance.
 - (d) Eggs of poor shell texture.
 - (e) Any tinted U. S. Certified eggs or high percentage tinted U. S. Approved eggs of the white-egg breeds.
 - (f) Unreasonable number of ill-shaped eggs.
 - (g) Dirty eggs.
 - (h) Eggs from flocks on probation or rejected.
 - (i) Eggs not meeting breeding stage of hatchery or of grade advertised.

- (3) Inadequate sanitation.
 - (a) Interior and exterior of incubator.
 - (b) Hatchery room and equipment.
 - (c) Brooder room and brooder equipment.
 - (d) Waste disposal facilities.
 - (4) Irregularities in advertisements.
 - (a) Misleading or untrue statements.
 - (b) Use of official terminology of which the hatchery is not entitled.
 - (c) Offering grades and making claims which cannot be justified.
 - (5) Not using official labels and N.P.I.P. Form 15 on shipments.
25. Discuss with owner or manager result of hatchery inspection.
- (a) Point out discrepancies, omissions, deficiencies, and other matters of a negative nature.
 - (1) Explain how to overcome these.
 - (b) Get hatcheryman to discuss his improvement program. Add to it only when needed. Don't be afraid to be complimentary when it is deserved.
 - (1) His program should include improvement each year as fast as it is practical, economically sound and capable of being carried out.
 - (2) Pullorum eradication and control should include plans for multiple testing, operating in higher pullorum classes and flock replacement from clean stock.

- (3) Breed improvement should include plans for using superior males and key flock system for flock replacement purposes and strict egg selection for flock replacements.
 - (4) General hatchery management should include plans for improving physical set-up, sanitation practices and efficiency of hatchery operations.
- (c) Fill out N.P.I.P. Form 5, (or its equivalent) "Hatchery Inspection Report" sign it, and leave hatcheryman his copy.
- (1) Items 1-4 inclusive are for the purpose of statistical data. In States using hatchery capacity as basis for hatchery dues exact incubator capacity as rated by manufacturer should be listed.
 - (2) Item 5. Discourage custom hatching unless from officially tested flocks.
 - (3) Item 6. When other than chicken eggs are handled encourage operator to handle other species in separate incubators as far away as possible. (See General Regulation 28 in M.P. 300)
 - (4) Item 7. Fumigation is required in the provisions of the plan. Manner and method used should be at the discretion of your official State agency. Egg source (multiple or single flock), pullorum class and hatchery history should be considered.
 - (5) Item 8. Sanitary conditions are a matter of judgment.
 - a. Incubator room ventilation should be from the outside.
 - b. Encourage egg cleanliness by education of hatcheryman and flockowner.
 - c. Encourage spotless incubators, interior and exterior, cleaning trays, and disinfecting or steam cleaning and using incubator room for purpose intended.

d. Discourage re-use of chick boxes.

e. Strongly urge segregation of brooding operations from hatchery and keeping brooding equipment clean and odorless.

(6) The remaining items can be answered from inspection work. If inspection shows excellent compliance with all provisions, compliments are in order under "remarks". A good report is one the hatcheryman can proudly put up in his hatchery for the public to see.

III. Inspecting U. S. Approved hatcheries.

A. "These hatcheries shall be inspected and approved by a State Inspector at least once during the hatching season." (See Paragraphs 8 and 9 in Section 1 of Article 2 in M.P. 300 and 555 respectively.)

1. This is a minimum requirement and more inspections are to be desired based on the judgment of necessity by the inspector of the official State agency to reasonably assure compliance with the various provisions of the plan.

(a) At least two inspections are needed where year-round hatching is being done, once in the spring and again in the fall.

(1) Additional checking may be needed on hatcheries having difficulty complying.

a. New hatcheries should be inspected first and earlier in the season - in January if possible. (See General Regulation governing admission of applicants for participation in the plans.)

b. At least one inspection should be made during the time the chicks are being hatched and graded for shipment or delivery to assure that the identification of various grades as advertised by the hatchery are being complied with.

B. "Hatching eggs and chicks of the U. S. Certified stage from other varieties may be hatched for sale or sold by a U. S. Approved hatchery" in the poultry plan provided all flocks of that variety are exclusively headed by U.S.R.O.P. males.

1. Under the turkey plan, "U. S. Approved hatcheries may hatch for sale and sell both U. S. Approved and U. S. Certified poultts of the same variety, provided adequate segregation of eggs and poultts is practiced and ample records are kept to satisfy the official State agency that there is no mixing or interchanging from one breeding stage to another."

C. With the larger hatcheries, two inspectors working together can accomplish the inspection work more thoroughly and efficiently.

1. One inspector can follow the production records, purchase records and setting records while the other examines the hatchery trays.

(a) The time required to thoroughly inspect a hatchery, therefore, depends upon the size of the hatchery, number of inspectors, their ability and cooperation and received.

(1) For the larger hatcheries it may take as much as 72 hours.

IV. Inspecting U. S. Certified hatcheries.

A. U. S. Certified chicken hatcheries "shall be inspected and approved by a State Inspector at least twice during the hatching season". (See Paragraph 4, Section 2 of Article 2 in M.P. 300.)

B. U. S. Certified turkey hatcheries shall be inspected and approved by a State inspector at least once during the hatching season. (See Paragraph 4, Section 2 of Article 2 in M.P. 555.)

V. Results of Non-Compliance.

A. Notification of violations.

1. Discuss violation of the plan with owner and/or manager. On minor points a warning is given and the opportunity

allowed for correction of such violations. Make notes of minor instances of non-compliance on hatchery-inspection report. Inspect the hatchery again if the management of the hatchery agrees to make corrective action. A second warning for the same offense is basis for recommendation for discontinuance as a participant in the plan.

2. On points of non-compliance such as eggs from non-tested flocks, eggs from flocks not meeting the requirements of the hatchery and cull eggs found in the incubators should be removed from the machines at once and dumped. Refusal of permission to do this on the part of the hatcheryman is basis for discontinuance as a participant in the plan.

- (a) If violation of a major point is a first offense or if hatcheryman committing a gross violation is a new participant, a stern warning should be given after eggs have been destroyed. A complete record of such violations should be made. (Some States have developed non-compliance forms to record such data.) Such hatcheries should be reinspected after a reasonable length of time to ascertain if corrective action was taken. If the hatcheryman has failed to comply a detailed report should be submitted to the official State agency and a hearing called unless the hatcheryman voluntarily withdraws:

NOTE: "Non-compliance with the provisions of the plan which is not corrected within a reasonable time shall bar any participant from further participation for a period of two years. Such action shall not be taken until a thorough investigation and hearing have been conducted by the official State agency."

VI. - INCUBATOR CAPACITY - MANUFACTURER'S RATING
(Chicken Eggs)

| Model | Setting | Capacity ¹ | Hatching ² | Total Capacity | Hatches per wk. |
|----------------|----------|-----------------------|----------------------------------|-----------------------|--------------------|
| | One Tray | Total | Capacity ² (Total) | | |
| Buckeye 7 | 150 | 5,400 | 1,800 | 7,200 | 1 |
| Buckeye 12 | 150 | 10,800 ⁽²⁾ | 1,800 | 12,600 | 2 |
| Buckeye 511 | 136 | 16,320 | 5,440 | 21,760 | 2 |
| Buckeye 521 | 136 | 32,640 ⁽²⁾ | 5,440 | 38,080 | 2 |
| Buckeye 32 | 136 | 24,480 | 8,160 | 32,640 | 1 |
| Buckeye 57 | 136 | 48,960 ⁽²⁾ | 8,160 | 57,120 | 2 |
| Buckeye 66 | 156 | 56,160 | 9,360 | 65,520 | 2 |
| Bundy 8 -1H | 135 | 6,075 | 2,025 | 8,100 | 1 |
| Bundy 16 -1H | 135 | 12,150 ⁽²⁾ | 4,050 | 16,200 | 1 |
| Bundy 28- 1H | 135 | 24,300 ⁽⁴⁾ | 4,050 | 28,350 | 2 |
| Bundy 56 -1H | 135 | 48,600 | 8,100 ⁽²⁾ | 56,700 | 2 |
| Chick Master | | | | | |
| 26 | 156 | 22,464 | 3,744 | 26,208 | 2 |
| Chick Master | | | | | |
| 52 | 156 | 44,928 | 7,488 | 52,416 | 2 |
| Chick Master | | | | | |
| 65 | 156 | 56,160 | 9,360 | 65,520 | 2 |
| Chick Master | | | | | |
| 78 | 156 | 67,390 | 11,230 | 78,620 | 2 |
| Cugley 9 | 171 | 8,208 | -- | 8,208 | - |
| Cugley 10 | 171 | 8,208 | 2,736 | 10,944 | 1 -2 |
| Cugley 12 | 171 | 12,312 | -- | 12,312 | - |
| Cugley 24 | -- | -- | 4,104 | 4,104 | 1 -2 |
| Cugley 48 | -- | -- | 8,208 | 8,208 | 1 -2 |
| Jamesway | | | | | |
| 2,940 | 210 | 2,520 | 420 | 2,940 | 2 |
| Jamesway 252 | 180 | 2,520 | 2,520 | 2,520 | 1 -2 |
| Jamesway 1,080 | 180 | 10,800 | 10,800 | 10,800 | 1 - 2 |
| Jamesway 2,700 | 180 | 2,700 | 2,700 | 2,700 | 1 - 2 |
| Petersime 6D | 112 | 4,704 | 1,568 | 6,272 | 1 |
| Petersime 11D | 112 | 9,408 | 1,568 | 10,976 | 2 |
| Petersime 12D | 112 | 8,512 | 3,000 | 11,512 | 1 |
| Petersime 20D | 112 | 17,024 | 3,000 | 20,024 | 2 |
| Petersime 42 | 112 | 34,048 ⁽²⁾ | 6,000 | 40,048 | 2 |
| Petersime 84 | 112 | 68,096 ⁽⁴⁾ | 12,000 | 80,096 ⁽²⁾ | 2 |
| Robbins 8H | 150 | 6,600 | 2,250 | 8,850 | 1 |
| Robbins 11H | 150 | 7,800 | 2,700 | 10,500 | 1 |
| Robbins 16H | 180 | 12,000 | 4,200 | 16,200 | 1 |
| Robbins 17H | 180 | 13,440 | 4,560 | 18,000 | 1 |
| Robbins 28H | 180 | 24,000 ⁽²⁾ | 4,200 | 28,200 | 2 |

VI. (Continued)

| Model | Setting | Capacity ¹ | Hatching | Total Capacity | Hatches per wk. |
|-------------|----------|-----------------------|----------------------------------|----------------|--------------------|
| | One Tray | Total | Capacity ² (Total) | | |
| Robbins 32H | 180 | 26,880 ⁽²⁾ | 4,560 | 31,440 | 2 |
| Robbins 36 | 180 | 26,880 ⁽²⁾ | 9,120 ⁽²⁾ | 36,000 | 1 -2 |
| Robbins 62 | 180 | 53,760 ⁽⁴⁾ | 9,120 ⁽²⁾ | 62,880 | 2 |
| Smith 28 | 156 | 21,060 | 7,020 | 28,080 | 2 |
| Smith 52 | 156 | 44,928 | 7,488 | 52,416 | 2 |
| Smith 65 | 156 | 56,160 | 9,360 | 65,520 | 2 |
| Smith 78 | 156 | 67,390 | 11,230 | 78,620 | 2 |

¹Figure opposite total setting capacity indicates number of compartments.

²Figure opposite hatching capacity indicates number of compartment.

